Masterweld 32 (ERNi-1)

Comparable specifications

ASME SFA A 5.14: ERNi-1
EN ISO 18274: Ni 2061 - NiTi3
BS 2901: Pt 5 NA 32
Werkstoff Nr.: 2.4155

Description and applications*

* *Illustrative, not-exhaustive list*

This grade may be used for:

- welding of wrought and cast forms of commercially pure nickel alloy to itself;
- welding of the clad side of nickel-clad steel and surfacing of steel;
- welding of dissimilar metals (this alloy to stainless and carbon steels, to other nickel alloys, to copper and copper alloys);
- overlaying steel;
- use in high-grade plant/engineering (primarily for the petro-chemical industry).

Ni1 contains enough titanium to control weld-metal porosity on welding processes.

Weldable base materials*

* *Illustrative, not-exhaustive list*

Nickel 200 and 201

All-weld metal mech. properties*

* *For reference only values*

Tensile strength (Rm): ≥ 410 N/mm^2
Yield Strength ($Rp_{0.2}$): ≥ 200 N/mm^2
Elongation: ≥ 30%
Charpy-V Impact (R.T.): ≥ 100 J

Chemical composition*

* *For reference only values*

C	Mn	Fe	P	S	Si	Cu	Ni	Co	Ti	Al
max	max	max	max	max	max	max	93.00	max	2.00	max
0.05	0.80	0.70	0.030	0.010	0.75	0.20	min	1.00	3.50	1.00